

ously noted by Bertrand; but curiously enough, the addition of hydrogen peroxide to the enzyme solution restored it to its usual activity. This and many similar experiments led Bach to believe that tyrosinase contains the oxygenase and peroxidase complements.<sup>14</sup> Our final conclusion must be then, that tyrosinase may have the usual oxidase complements (oxygenase plus peroxidase) and that its peroxidase may be specific just as the peroxidase of laccase is specific in its action upon substances having a certain constitution.

(To be continued)

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## REDISCOVERY OF TILLANDSIA SWARTZII BAKER

BY N. L. BRITTON

In "Journal of Botany," 26: 12, published in 1888, and in "Handbook of Bromeliaceae," 191, 1889, Mr. J. G. Baker described this species, based on a specimen collected many years ago by Swartz in the island of Jamaica and supposed by him to be *Tillandsia paniculata* L. Professor Carl Mez, in his Monograph of the family Bromeliaceae (DC. Mon. Phan. 9: 884), published in 1896, states that he has seen this specimen, but regards it as doubtful, perhaps referable to the Liliaceae.

The type specimen is preserved in the herbarium of the British Museum of Natural History, and while there in the spring of 1910, I examined it and was inclined to agree with Professor Mez. But, on returning to New York immediately afterward, I found in a parcel of choice Jamaica plants collected early the same year by Mr. William Harris, fine specimens, which I recognized as of the same species, and on sending one of these to Mr. Edmund Baker at the British Museum, he confirmed my identification by a comparison with the type. Mr. Harris found the plant growing on rocks in the Rio Minho Valley, March 3, 1910 (No. 10,885), more than one hundred years after its collection in

<sup>14</sup>Recently he found that the salts of manganese, etc., could apparently replace the peroxidase part. In this connection see: Ber. Chem. Gesell. 43: 366. 1910.



FIG. 1. *Tillandsia Swartzii* Baker.

Jamaica by Swartz, and, presumably, it has not been seen in a living state by any botanist during this long period, a striking illustration of the extremely local distribution of some West Indian species.

It would appear that the plant was correctly referred to the Bromeliaceae at its original description; as Mr. Baker remarks, it is allied, at least in habit, to *Tillandsia utriculata* L., though he places the two in different subgenera. In floral structure it differs from both his subgenera *Platystachys* and *Cyathophora* by having a pair of scales at the base of each corolla-segment, and in this feature agrees with his subgenus *Vriesia*, a group regarded by Professor Mez as of generic rank.

As shown by the specimens collected by Mr. Harris, the inflorescence is about 1.3 meters high, floriferous from about the middle, the lower panicle-branches up to 3 dm. long, the lower bracts of the scape lanceolate, 1-1.5 dm. long, long-acuminate; the basal leaves are narrowly lanceolate, 6-8 dm. long, 4-6 cm. wide and very long-acuminate, glabrous and finely many-nerved; the flowers are sessile and quite widely separated on the slender branches of the inflorescence, their bracts ovate-lanceolate, acutish, about 1 cm. long; the linear sepals are 2 cm. long, and the thin parallel-veined petals 3 cm. long, linear-lanceolate and acuminate, about one-fourth longer than the stamens.

The capsule was described by Mr. J. G. Baker as at least twice as long as the calyx.

NEW YORK BOTANICAL GARDEN.

## LOCAL FLORA NOTES—VIII\*

BY NORMAN TAYLOR

*Species*

*Specimens wanted from*

### CRUCIFERAE

*Arabis hirsuta* (L.) Scop.

Northern N. J. and N. Y.

*Cardamine pratensis* L.

N. J. or elsewhere in the range. †

\* Continued from Bull. Torrey Club 37: 559-562. N 1910.

† The local flora range as prescribed by the Club's Preliminary Catalogue of 1888 is as follows: All of the state of Connecticut; Long Island; in New York the